STATEMENT OF CONSIDERATIONS

REQUEST BY NEUCO, INC., FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-03NT41768; W(A)-03-049, CH-1167

The Petitioner, NeuCo, was awarded this cooperative agreement for the performance of work entitled, "Clean Coal Power Initiative (CCPI). The purpose of the CCPI is to improve coal-based generation's emissions profiles, efficiency, maintenance requirements and extending asset life as primary goals for enhancing the long term viability of the United States' abundant coal resources. The purpose of Neuco's project is to design, develop and demonstrate integrated on-line optimization systems at Dynegy Midwest Generation's Baldwin Energy Complex. The optimization modules to be developed as part of this project will address sootblowing, SCR operations, overall thermal performance, and plant-wide profit optimization at all three of the coal-fired generating units comprising the Baldwin Energy Complex. Two of these units are 600 MW cyclone boilers with SCRs; the third is a 600 MW tangentially-fired boiler. The benefits will take the form of reduced NOx, increased fuel efficiency, and reliability. The increases in fuel efficiency (heat rate reduction) will also provide commensurate reductions in greenhouse gases, mercury, and particulates. This waiver is for inventions of Neuco only.

The total estimated cost of the cooperative agreement is \$19,094,732, with the DOE share being \$8,592,629, or 45%, while the remaining cost share of 55%, or \$10,502,103, will be provided by Neuco. The period of performance is four (4) years.

In its response to question 5 of the attached waiver petition, NeuCo has described its technical competence in the field of combustion optimization and power control by submitting a list of NeuCo Published papers and articles This response demonstrates its technical competency in the field of combustion optimization and power control.

In its response to question 10 of the attached waiver petition, NeuCo states that it does not expect to be without competitors. Its competitors are offering other low-cost solutions to combustion optimization. NeuCo has attached a report from the META Group entitled, "Generation Combustion Optimization: The Market and Players." This report describes the combustion optimization market as of July 2002, and shows NeuCo as having a 45% share of this market. NeuCo expects that the ever increasing performance-to-price ratio of computer technologies will lower the entrance barrier to competitive technologies, and therefore grant of the waiver should have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein NeuCo has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which NeuCo agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, NeuCo agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements. The petitioner has further agreed to modification of the data clause of the subject cooperative agreement (48 C.F.R. 952.227-14) by adding paragraph (k), Alternative VI, concerning contractor licensing of data.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

Mark P. Dvorscak
Assistant Chief Counsel
Intellectual Property Law Division

Date: <u>New 17 2007</u>

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

George Rudins

Deputy Assistant Secretary Office of Fossil Energy

Coal and Power Systems

FE-20/FORS

Date: 1/29/04

APPROVAL:

Paul A. Gottlieb

Assistant General Counsel for Technology Transfer and

Intellectual Property

GC-62

Date

(t) U. S. COMPETITIVENESS

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.